

Integrating Access Management into the MPO Transportation Planning Process

Jeffrey Kramer, AICP (contact)
Center for Urban Transportation Research
University of South Florida, College of Engineering
4202 E. Fowler Ave., CUT100
Tampa, FL 33620-5375
(813) 974-1397
kramer@cutr.usf.edu

Kristine M. Williams, AICP
Center for Urban Transportation Research
University of South Florida, College of Engineering
4202 E. Fowler Ave., CUT100
Tampa, FL 33620-5375
(813) 974-9807
kwilliams@cutr.usf.edu

Karen E. Seggerman, AICP
Center for Urban Transportation Research
University of South Florida, College of Engineering
4202 E. Fowler Ave., CUT100
Tampa, FL 33620-5375
(813) 974-5723
seggerman@cutr.usf.edu

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ABSTRACT

The research objective for NCHRP Project 8-46: *A Guide for Including Access Management in Transportation Plans* is to develop practical guidance for integrating access management principles, techniques and strategies into transportation planning at the state, metropolitan, corridor and local level. The project is being developed by Dye Management, in coordination with Urbitrans Associates, and the Center for Urban Transportation Research (CUTR). This paper addresses CUTR's research findings to date on current efforts of MPOs to integrate access management into their transportation planning activities.

INTRODUCTION

The Center for Urban Transportation Research (CUTR) is part of the research team that is conducting NCHRP Project 8-46: *A Guide for Including Access Management in Transportation Plans*. The purpose of the project is to develop practical guidance for integrating access management into transportation planning at the state, metropolitan, corridor, and local level. Toward that end, CUTR has been researching access management practices of MPOs and local governments in the planning process.

It is important to address access management at the planning stage for a variety of reasons. Access management is the method for carrying out the roadway functional hierarchy that is the foundation of transportation planning – a hierarchy that is defined by its relative emphasis on access or mobility. Access management is also a cost-effective way to advance a broad range of planning goals relating to safety, mobility, environmental, and system and corridor preservation. In addition, efforts to address access management inevitably promote better coordination between land use and transportation planning and between state and local governments in corridor management.

The vast majority of current research knowledge is based on the implementation stages of project development. Little research has been conducted on access management activities at the planning stage. NCHRP Project 8-46 fills that gap by focusing on the integration of access management in transportation planning at all levels of government, including the metropolitan transportation planning process managed by federally designated metropolitan planning organizations (MPO). This paper presents the findings to date on current efforts of MPOs to integrate access management into their transportation planning activities.

METHODOLOGY

A survey of current practice was distributed to all MPOs then in existence (340 in total) regarding the extent to which they consider access management in their transportation planning activities. The Association of Metropolitan Planning Organizations (AMPO) administered the on-line survey through their web site. A total of 56 MPOs responded, yielding a 16% response rate. Next, in-depth telephone interviews were held with a smaller group of respondents that reported access management activities. This group was also stratified by geographic location and size of the metropolitan area served. The interview and survey findings were complemented by a review of planning documents, on-line materials, and published literature.

OVERVIEW AND FINDINGS

The TRB *Access Management Manual* notes that MPOs may become involved in access management due to the requirements placed upon them by federal transportation law (1). Specifically, MPOs are required to:

- Prepare metropolitan long-range transportation plans (LRTP) and transportation improvement programs (TIP),
- Maintain a 3-C (continuing, cooperative, and comprehensive) transportation planning process and a congestion management system (CMS), and
- Implement the Congestion Mitigation and Air Quality Improvement Program (CMAQ) in designated non-attainment and maintenance areas.

In all of these activities, MPOs must address system and corridor preservation, including access management strategies. Additionally, MPOs undertake activities of their own that could involve the application of access management strategies. These activities include sub-area and

corridor studies, “visioning” activities, review of state and local transportation projects, and providing training, education, and technical assistance to local agencies and stakeholder groups.

Methods identified in the *Manual* for incorporating access management into long-range transportation planning are:

- Include goals, objectives, and policies for access management in the long range transportation plan and corresponding performance measures and actions.
- Address access management strategies in addition to capacity improvements for corridors identified in the plan as in need of improvement.
- Use the planning and programming process to facilitate local government participation in advancing access management objectives and policies.
- Apply access management strategies to improve efficiency on corridors identified as congested by the Congestion Management System (CMS).
- Fund access management plans, improvements and activities. CMAQ funds could also be used to implement access management strategies on congested corridors in designated non-attainment and maintenance areas.

Using the guidance in the *Access Management Manual* as a starting point, the survey and follow-up interviews evaluated the extent to which MPOs were in fact engaging in these activities, and whether there are other ways that MPOs are advancing access management. The research also explored the success factors and barriers experienced by MPOs, and their motivations for addressing access management in the planning process.

General Observations

Based on the information provided by MPOs across the country, the following general observations can be made relative to the integration of access management into MPO planning processes:

MPOs are integrating access management concepts and principles into their transportation planning process to varying degrees, with a few taking a truly comprehensive approach. Many are finding access management as a useful component of their long-range transportation planning process or their congestion management system or in corridor planning studies, but it does not appear to be a widespread practice to integrate access management into each of these planning processes.

MPOs with a comprehensive approach have integrated access management concepts and principles into all of their transportation planning activities to achieve broad policy objectives.

The objectives most commonly mentioned include:

- Integrating land use and transportation decision-making,
- Preserving the capacity and functionality of the existing transportation system,
- Enhancing safety,
- Increasing system capacity in a manner that is sensitive to potential community and environmental impacts, and
- Maximizing the return of scarce transportation resources.

For example, the Capital District Transportation Committee (CDTC) in Albany, NY is proactively seeking to integrate land use and transportation decision-making in the region. The CDTC approach represents a shift in focus from the state (what is the state proposing for our community?) to the community (what do we want to see happen?) in a cooperative process aimed at finding acceptable solutions. Roadway widening is viewed as an option of last resort in

favor of operational and land use strategies, such as access management. This philosophical approach guides all transportation planning activities and processes.

The West Florida Regional Planning Council (WFRPC), the staffing agency for all three MPOs in the Panhandle region of Florida, cites “system preservation and maximizing scarce transportation resources” as the primary reasons for integrating access management into all aspects of their transportation planning practice. They are especially concerned with maintaining the functional integrity of the regional roadway network, particularly in light of an increasing funding shortfall for needed roadway capacity improvements.

Pittsfield, MA, although designated as an urbanized area, covers a fairly rural part of Massachusetts where maintaining the small town, rural character is important to the local identity and political culture. Therefore, new or wider highways are highly controversial. But traditional capacity improvements are widely seen as the preferred option of the Massachusetts Highway Department (MassHighway). Sometimes roadway widening proposals made by MassHighway face vigorous opposition from the local political leadership, interest groups and/or citizens interested in preserving the rural character of the region. The Berkshire MPO in western Massachusetts has found that corridor access management is one of the few politically acceptable solutions for improving safety and capacity on the existing roadway network.

Given limited authority to implement access management, MPOs commonly view their role as “barrier breakers” or facilitators. For example, these activities included technical assistance to local governments in corridor and subarea planning, training workshops, producing model regulations, preparing model scopes of services for access management projects, applying access management considerations in project prioritization, spearheading legislative changes, and public outreach and involvement activities. MPOs also fund access management improvements using a variety of funding sources, with the most common being federal Surface Transportation Program funds.

For example, the Ohio-Kentucky-Indiana (OKI) Regional Council of Governments in Cincinnati was instrumental in removing a perceived legal barrier to access management in Ohio. OKI spearheaded a successful effort to modify Ohio statutes to grant clear authority to counties and townships to develop access management plans and policies.

The CDTC in Albany, NY develops a long-range transportation plan as a budget and policy plan that focuses not just on the service provided by the transportation system, but also on the quality of the transportation system. This places transportation quality and quantity on an even playing field in the resource allocation process. The primary mechanism for doing this is a measure in addition to Level of Service (LOS) called Level of Compatibility (LOC). In short, the LOC is a means to measure conflicts between land access and through traffic. The CDTC allocates resources to address transportation needs related to both LOS and LOC. There is a budget in the long-range transportation plan for both types of projects.

The Duluth-Superior Metro Interstate Committee in Duluth, MN solicits projects for inclusion in the programming process and ranks each proposed project using a score based on certain criteria. Applicants must identify the project category (safety, preservation capacity expansion, enhancement, bridge replacement, etc.), type (resurfacing, widen shoulders, turn lanes, traffic signals, signing, landscaping, etc) and intent (safety improvement, multimodal improvement, environmental enhancement, improve air quality, etc.). Access management improvements can receive favorable consideration in the point allocation process under many of the criteria. These criteria include project need and benefit (accident or congestion reduction), impact on network mobility (preservation of capacity or functional classification), planning

support (improvements that rise from a local planning effort could receive points), multimodalism (improvements to multimodal access or improved transit service) and environmental and social considerations (improvements that maximize the efficient use of land or minimize neighborhood impacts).

Some of the MPOs support access management activities through the Unified Planning Work Program. Activities include conducting corridor studies and/or sub-area studies in the region that focus on access management issues and provide access management strategies for improving safety or capacity where appropriate.

For example, the Duluth-Superior Metro Interstate Committee in Minnesota has developed a program to conduct corridor plans for member jurisdictions on a competitive basis. The MPO solicits ideas for corridor plans every year, receiving an average of 20 requests a year and generally conducting three to four corridor plans a year. These plans are funded through the UPWP using federal PL funds. Access management improvements often play a key role in the recommended strategy for addressing identified corridor deficiencies and become funded projects through the long-range planning process.

MPOs that actively integrate access management strategies into MPO activities tend to have a staff member, typically the MPO Staff Director, who has made it a priority. It is too easy for project managers to address transportation needs through traditional approaches, and to avoid the more complex challenges of coordinating land use and transportation through access management. A champion for access management can remind project managers and policy makers that access management can often achieve project goals in a more cost effective and environmentally sensitive way.

Several MPOs said they had integrated access management concepts into their planning activities to maintain consistency with a state access management program. In states without an access management program, MPOs sometimes assumed the role of advocate for integrating access management into state planning and project development activities.

For example, the Androscoggin Transportation Resource Center (ATRC) in Auburn, ME began focusing on access management as a way to maintain consistency with the new Maine DOT access management program. The Maine DOT access management requirements are primarily being applied in rural parts of the state, but MPOs are being encouraged to incorporate access management into their planning process as well. Maine DOT is also offering to help fund projects on congested urban corridors where access management improvements are among the primary measures to combat congestion.

Many MPOs responding to the survey said that they actively promote access management strategies in lieu of or in addition to roadway widening projects. Popular strategies include:

- Adding auxiliary lanes,
- Adding a raised median,
- Driveway consolidation and/or removal, and
- Improved signal spacing and coordination.

Public outreach/education is perceived to be a critical component of an access management program. Many MPOs make a concerted effort to reach out to a variety of stakeholder and interest groups to educate them on the benefits of access management. General education efforts seem to be targeted primarily at local elected officials, local government staff, and interested stakeholder groups. Education efforts related to specific projects or corridors seem to be more targeted toward individual business interests, neighborhood associations and property owners.

Few MPOs monitor the effectiveness of their access management activities.

Success Factors

A variety of “success factors” were observed that seemed to contribute to the integration of access management considerations into MPO planning practices. Among those were the following:

- Integrate access management as a supporting strategy into every aspect of MPO activities, at every level of MPO decision-making and into every MPO process including safety, air quality, land development, etc. Make it a “tool” in the MPO “tool box”.
- Promote corridor access management initiatives in lieu of road widening in political environments that are sensitive to potential changes in rural character or other unique aesthetic characteristics.
- Develop MPO policies and practices that support roadway functional hierarchy, particularly the concept of limiting access on higher order roadways.
- Develop mechanisms in the planning process to encourage appropriate access conditions on major roadways through improved coordination of transportation and land use decision-making, such as:
 - Requiring local jurisdictions to enact land development regulations that support access management before including a project in the long-range transportation plan or transportation improvement program, or
 - Applying a weighted formula that places emphasis on corridors that are access controlled by state or local policy in the project selection process.
- Place available funds into separate budgets for different types of projects, including budgets specifically intended to address access management issues or for other project categories that are supported by access management techniques (safety, congestion mitigation, aesthetic and other targeted community enhancements, etc.).
- Support access management activities through the Unified Planning Work Program, where the MPO represents the primary source of transportation planning expertise in the region. For example, MPOs can conduct corridor studies and/or sub-area studies in the region that focus on access management issues and provide access management strategies for improving safety or capacity where it is appropriate to do so
- Take a leadership role in breaking down barriers to access management in your region. This may come in a variety of forms and include activities such as:
 - Providing supplemental funding for an already programmed project,
 - Preparing local access management ordinances or updating local regulations where the professional and technical capacity of local agencies is limited,
 - Coordinating activities and processes between and among various project stakeholders, or
 - Developing a model contract for local agencies to use when retaining consultant services for a corridor access management plan.
- Designate a staff level champion to ensure appropriate consideration of access management strategies and techniques in MPO activities and practices. It is easy for individual MPO staff members and consultants to become focused on narrow subject areas. Assigning somebody the role of “champion” creates an internal mechanism to remind MPO and consultant project managers responsible for the conducting the various aspects of MPO planning to consider access management strategies in their deliberations.

- If there is a statewide access management program, establish policies, standards and procedures that leverage the state transportation agency's effort. Take advantage of studies and other work already performed by the state in an effort to maximize MPO resources.
- In states with no access management program, consider participating in conceptual design review and other project development related activities of the state transportation agency to ensure that access management principles and commitments made during the planning process are integrated into the final project. Also, encourage access management strategies where appropriate for all projects, including roadway maintenance projects.
- Include as many people as possible in the education process. Don't attempt to accomplish access management in a vacuum. Educate MPO participants, elected officials, stakeholders and the public about the benefits of access management at every opportunity presented. The more people are exposed to access management principles and benefits, the more accepting they will be of proposed access management policies and projects.
- Conduct project related public involvement in small group or one-on-one venues. Corridor plans and access management are personal issues for business owners and residents. Taking the time to meet one-on-one with business owners or with small neighborhood groups provides a less hostile environment for telling people about the project and understanding or addressing their concerns than the large public meeting or hearing format. Open house meeting formats can also be effective in allowing one-on-one conversations. However, large group meetings tend to encourage vocal opponents to grandstand to cheers from the audience. This is not a good venue for engaging stakeholders in a meaningful discussion of the trade-offs involved in access management.

Barriers/Challenges

The survey and interviews also solicited feedback from MPOs on continuing barriers and challenges to integrating access management into the MPO transportation planning process. These included the following:

- Overcoming the mindset that access management is an implementation and not a planning issue.
- Identifying funding for access management improvements. This is equally true for stand alone improvements and of design modifications or add-on costs for traditional capacity or maintenance improvements.
- A lack of staff time and financial resources to stay involved in and influence state and local planning activities. This also affects the ability of the MPO to get communities interested in access management and to provide technical assistance to local governments on access management issues.
- MPOs have limited authority to implement access management through the land development or roadway improvement process (typically controlled by state or local agencies).
- Coordinating access management improvements between state and local agencies and individual departments of those agencies can be time consuming and frustrating.

- Where the state transportation agency culture does not support access management, the state may discourage or even actively oppose efforts to integrate access management into capacity or maintenance projects on the state system.
- Where the state has no access management program, guidelines, standards or procedures, MPOs may not be aware of access management strategies as a viable option for meeting regional transportation needs and/or may not be willing to take the lead in promoting access management on state roads.
- Preconceived notions of the negatives of access management strategies can generate significant opposition, particularly from the business and development community. Overcoming that perception requires persistent public education and that may still not address concerns of individual business owners regarding site-specific impacts.
- Dealing with expectations of higher quality products while available transportation resources are not keeping pace with the rising cost to implement a transportation improvement (particularly right-of-way costs).
- Overcoming a traditional capacity-first approach to addressing transportation issues at the state, MPO and local level.
- Convincing local governments of the need to develop corridor access management plans in advance of development. Local elected officials may not see the point of managing access between large tracts of agricultural or otherwise vacant land adjacent to state or county highways. But without a plan to guide development, the first large development projects (especially commercial ones) will often locate at the major intersections, where inadequate corner clearance results in long-term damage to the efficiency and safety of the roadway network.
- Dealing with the small land owner can be challenging because they are not as familiar with access management techniques and benefits as national development companies and are more worried about the impact on property values or business activity. Often the smaller land owner believes that direct access to the arterial network is a property right, which is not actually the case in many states.
- The state transportation agency access permitting staff can be inflexible and uncommunicative when making driveway location and design decisions.
- Overcoming the public belief that U-turns are dangerous can be a challenge when considering median projects.

CONCLUSION

The research to date indicates that MPOs are at varying stages of integrating access management into their planning processes. Some are just getting started; others have been engaged in access management for decades. A few are considering access management in a comprehensive manner, from long range planning to prioritization and programming; but that is not the norm. More typically, access management is being addressed through outreach and education on the benefits of access management, corridor and sub-area studies, and/or long-range goal setting. Also typical was a view of access management as more of a short range planning or project specific activity.

Motivations for engaging in access management were many, and tended to revolve around broad planning objectives and a growing recognition of the adverse, cumulative impacts of curb cuts on roadway safety and operations. Given that MPOs have limited authority to implement access management, many saw their role as one of “breaking down barriers”.

Examples ranged from providing technical assistance to developing model consultant contracts and/or regulations to conducting corridor and/or sub-area plans. These activities were advancing access management practices at the local level and, in some cases, encouraging greater attention to access management in state highway projects.

The presence or absence of a champion at the staff level was a clear factor that influenced the degree to which access management had been integrated into the MPO planning process. As with most planning activities, politics has a strong influence on agenda setting in the metropolitan planning process. Without some clear political motivation, access management policies and strategies would probably not be considered unless a strong advocate at the staff level spearheaded the effort. Whether and to what degree the state transportation agency had embraced access management also influenced the priority placed on access management in the MPO planning process.

The research underway for NCHRP Project 8-46 has provided insight into successful practices for integrating access management into the MPO planning process, as well as continuing barriers. The next step is to translate these best practices into guidelines for broader application. The resulting guidebook will provide practical guidance on how to integrate access management into transportation planning at every level of government. MPOs across the country, regardless of size or planning philosophy, will find something of value in the guide for their transportation planning efforts.

REFERENCES

1. Committee on Access Management, *Access Management Manual*, Transportation Research Board, Washington, D.C.: National Academy Press, 2003.